

ABSTRACT OF THE DISCLOSURE

The invention is a process for epoxidizing olefins with hydrogen and oxygen in the presence of a palladium-containing titanium zeolite and a palladium-free titanium zeolite. The process exhibits good productivity and selectivity for olefin epoxidation with hydrogen, and oxygen. Surprisingly, the presence of palladium-free titanium zeolite in addition to the palladium-containing titanium zeolite in the process improves the palladium productivity of the process.